

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of preserving state information for applications over a telephone interface using a voice application computer, the method, performed by the voice application computer, comprising:

receiving from a user a call over the telephone interface, the call initiating a current telephone session;

identifying the user placing the call based on telephone identifying information associated with the call;

after identifying the user,

identifying a user profile of a plurality of user profiles stored by the voice application computer based on the identified user telephone identifying information associated with the call; and

identifying state information associated with the user profile, the state information comprising a plurality of cookies retrieved from other computers over a web interface and resulting from at least one prior telephone session of the identified user, the voice application computer storing the user profile and the state information associated with the user profile;

storing policies to control accessing of the plurality of cookies and storing of new cookies;

automatically and selectively providing, by the voice application computer, a subset of the plurality of cookies to an application based on the policies; and

storing a new cookie with the plurality of cookies based on the policies wherein new cookies are stored persistently so that they are available for subsequent telephone sessions of the identified user.

2. (Previously Presented) The method of claim 1, wherein the policies are dependent on at least one of needs of the voice application computer, first decisions made

by at least one operator of the voice application computer, or second decisions made by users of the voice application computer.

3. (Original) The method of claim 1, wherein the application has a corresponding uniform resource indicator (URI) and wherein the subset of the plurality of cookies is selected according to applicability of each cookie in the plurality of cookies to the URI.

4. (Original) The method of claim 3, wherein the applicability of a cookie for inclusion in the subset is determined according to IETF RFC 2109.

5. (Canceled)

6. (Previously Presented) The method of claim 1, wherein the new cookie is received from the application as part of a hypertext transfer protocol (HTTP) request for a uniform resource indicator (URI).

7. (Previously Presented) The method of claim 1, wherein at least some of the policies are based on IETF RFC 2109.

8. (Previously Presented) The method of claim 1, wherein the storing a new cookie occurs responsive to verification of the new cookie by the voice application computer based on the policies.

9. (Previously Presented) The method of claim 1, further comprising verifying a password for the user profile received over the telephone interface prior to identifying the state information associated with the user profile.

10. (Previously Presented) The method of claim 1, wherein the identifying a user profile comprises creating a user profile on the voice application computer.

11. (Currently Amended) An apparatus for preserving state information for applications over a telephone interface, the apparatus implemented within a voice application computer, the apparatus comprising:

means for receiving telephone identifying information over the telephone interface resulting from placing of a telephone call from a user that initiates a current telephone session;

means for identifying the user who placed the telephone call based on the telephone identifying information;

means for identifying a user profile of a plurality of user profiles stored by the voice application computer based on the identified user who placed the telephone call~~telephone identifying information;~~

means for identifying state information associated with the user profile, the state information comprising a plurality of cookies retrieved from other computers over a web interface and resulting from at least one prior telephone session of the identified user;

means for storing policies for accessing and storing cookies;

means for storing a new cookie with the plurality of cookies based on the policies, wherein new cookies are stored persistently so that they are available for subsequent telephone sessions of the identified user; and

means for automatically and selectively providing a subset of the plurality of cookies to an application based on the policies.

12. (Original) The apparatus of claim 11, wherein the apparatus supports a second application, the application provided by a first legal entity and the second application provided by a second legal entity.

13. (Original) The apparatus of claim 12, wherein the plurality of cookies includes at least a first cookie set by the second application, and wherein the subset of the plurality of cookies does not include the at least a first cookie.

14. (Currently Amended) A computer system to preserve state information for applications over a telephone interface, the computer system comprising:

a first interface including a first program to access a second computer system via a web interface, the second computer system including an application;

a second interface to send and receive audio signals to and from a telephone and to receive telephone identifying information corresponding to the telephone; and

a control subsystem to control the first interface and the second interface, the control subsystem including a second program for identifying a user placing call to initiate a current telephone session based on the telephone identifying information and identifying a user profile ~~according to the telephone identifying information~~ for the identified user, the user profile having corresponding state information,

the state information comprising a plurality of cookies retrieved from other computer systems via the web interface, generated based on at least one prior telephone session of the identified user, and stored in the computer system,

at least one policy being stored by the computer system to control access to the plurality of cookies and storing of new cookies, wherein new cookies are stored persistently so that they are available for subsequent telephone sessions of the identified user.

15. (Currently Amended) A computer-readable tangible storage medium embedded with a computer program executable by a voice application computer, the computer program for preserving state information for applications over a telephone interface, the computer program comprising:

- a first set of instructions for receiving telephone identifying information from the telephone interface, the telephone identifying information identifying a user placing a telephone call to initiate a current telephone session with the voice application computer;
- a second set of instructions for identifying a user profile based on the user identified by the telephone identifying information;
- a third set of instructions for identifying state information associated with the identified user profile, the state information comprising a plurality of cookies retrieved from other computers over a web interface and resulting from at least one prior telephone session of the user identified by the telephone identifying information;
- a fourth set of instructions for storing policies for accessing and storing cookies;
- a fifth set of instructions for storing a new cookie based on the policies, wherein new cookies are stored persistently so that they are available for subsequent telephone sessions of the user identified by the telephone identifying information; and
- a sixth set of instructions for automatically and selectively providing a subset of the plurality of cookies to an application based on the policies, the sixth set of instructions responding to receiving a request over the telephone interface to initiate the application.

16. (Previously Presented) The computer program of claim 15, wherein the policies are dependent on at least one of needs of the voice application computer, first decisions made by at least one operator of the voice application computer, or second decisions made by users of the voice application computer.

17. (Previously Presented) The computer program of claim 16, wherein each cookie in the plurality of cookies is associated with a corresponding domain, wherein the request includes a request host and wherein the subset of the plurality of cookies comprises cookies with a corresponding domain similar to a domain associated with the request host.

18. (Previously Presented) The computer program of claim 15, wherein the second set of instructions further comprises a set of instructions for creating a new user profile responsive to receiving telephone identifying information not associated with an existing user profile.

19. (Previously Presented) The computer program of claim 15, wherein the second set of instructions further comprises a set of instructions for creating a temporary user profile responsive to receiving telephone identifying information not associated with an existing user profile and wherein the computer program further comprises a seventh set of instructions for deleting the temporary user profile upon receiving a signal from the telephone interface signaling an end of a telephone call.

20. (Canceled)

21. (Previously Presented) The method of claim 1, further comprising:
permitting a user to manage the state information associated with the user.

22. (Currently Amended) ~~The method of claim 1, further comprising:~~ A method of preserving state information for applications over a telephone interface using a voice application computer, the method, performed by the voice application computer, comprising:
receiving a call over the telephone interface;

identifying a user profile of a plurality of user profiles stored by the voice application computer based on telephone identifying information associated with the call;
identifying state information associated with the user profile, the state information comprising a plurality of cookies retrieved from other computers over a web interface and resulting from at least one telephone session, the voice application computer storing the user profile and the state information associated with the user profile;
storing policies to control accessing of the plurality of cookies and storing of new cookies;
automatically and selectively providing, by the voice application computer, a subset of the plurality of cookies to an application based on the policies;
storing a new cookie with the plurality of cookies based on the policies;
identifying a user associated with the user profile during a telephone session;
determining a confidence level indicating an extent to which the user has been identified;
creating a cookie associated with the telephone session;
persistently storing the created cookie when the confidence level matches a first predetermined level; and
deleting the created cookie at an end of the telephone session when the confidence level matches a second predetermined level.

23. (Currently Amended) ~~The apparatus of claim 11, further comprising:~~ An apparatus for preserving state information for applications over a telephone interface, the apparatus implemented within a voice application computer, the apparatus comprising:
means for receiving telephone identifying information over the telephone interface;
means for identifying a user profile of a plurality of user profiles stored by the voice application computer based on the telephone identifying information;

means for identifying state information associated with the user profile, the state information comprising a plurality of cookies retrieved from other computers over a web interface and resulting from at least one telephone session;

means for storing policies for accessing and storing cookies;

means for storing a new cookie with the plurality of cookies based on the policies;

means for automatically and selectively providing a subset of the plurality of cookies to an application based on the policies;

means for identifying a user associated with the user profile during a telephone session;

means for determining a confidence level indicating an extent to which the user has been identified;

means for creating a cookie associated with the telephone session;

means for persistently storing the created cookie when the confidence level matches a first predetermined level; and

means for deleting the created cookie at an end of the telephone session when the confidence level matches a second predetermined level.

24. (Currently Amended) ~~The computer system of claim 14, wherein the computer system is configured to:~~ A computer system to preserve state information for applications over a telephone interface, the computer system comprising:

a first interface including a first program to access a second computer system via a web interface, the second computer system including an application;

a second interface to send and receive audio signals to and from a telephone and to receive telephone identifying information corresponding to the telephone;

a control subsystem to control the first interface and the second interface, the control subsystem including a second program for identifying a user profile according to the telephone identifying information, the user profile having corresponding state information,

the state information comprising a plurality of cookies retrieved from other computer systems via the web interface, generated based on at least one telephone session, and stored in the computer system; and
at least one policy being stored by the computer system to control access to the plurality of cookies and storing of new cookies,
wherein the computer system is configured to:

identify a user associated with the user profile during a telephone session,
determine a confidence level indicating an extent to which the user has been identified,
create a cookie associated with the telephone session,
persistently store the created cookie when the confidence level matches a first predetermined level, and
delete the created cookie at an end of the telephone session when the confidence level matches a second predetermined level.

25. (Currently Amended) ~~The computer program of claim 15, further comprising:~~
A computer program executable by a voice application computer, the computer program for preserving state information for applications over a telephone interface, the computer program comprising:

a first set of instructions for receiving telephone identifying information from the telephone interface;
a second set of instructions for identifying a user profile based on the telephone identifying information;
a third set of instructions for identifying state information associated with the user profile, the state information comprising a plurality of cookies retrieved from other computers over a web interface and resulting from at least one telephone session;
a fourth set of instructions for storing policies for accessing and storing cookies;
a fifth set of instructions for storing a new cookie based on the policies;

a sixth set of instructions for automatically and selectively providing a subset of the plurality of cookies to an application based on the policies, the sixth set of instructions responding to receiving a request over the telephone interface to initiate the application;

- a seventh set of instructions for identifying a user associated with the user profile during a telephone session;
- an eighth set of instructions for determining a confidence level indicating an extent to which the user has been identified;
- a ninth set of instructions for creating a cookie associated with the telephone session;
- a tenth set of instructions for persistently storing the created cookie when the confidence level matches a first predetermined level; and
- an eleventh set of instructions for deleting the created cookie at an end of the telephone session when the confidence level matches a second predetermined level.

26. (Currently Amended) A method performed by a voice application computer that includes a telephone interface and a web interface, comprising:

storing, by the voice application computer, a plurality of user profiles and a plurality of cookies retrieved from one or more other computers over the web interface and resulting from at least one prior telephone session, each cookie associated with a user who placed a telephone call that initiated the prior telephone session;

receiving a call over the telephone interface, the call causing a telephone session to be established with an application;

identifying the user placing the call over the telephone interface based on telephone identifying information associated with the call;

identifying one of the user profiles based on the identified user~~telephone identifying information associated with the call;~~

identifying a group of the cookies corresponding to the identified user profile, the cookies being persistently stored during a prior telephone session initiated by the identified user; and
automatically and selectively providing, by the voice application computer, a subset of the group of cookies to the application for the telephone session.